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RECEIVING BAG  
[Aufnahmetüte]

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## Description

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This invention relates to a device for receiving waste from smoking and/or chewing gum, in accordance with the precharacterizing part of Claim 1.

Such a device is known from the German patent application P 41 31 718 of the same applicant. The waste container shown in this application contains a receiving bag having an upper receiving part, into which ash from smoking, etc., can be placed, and a lower storage part, in which the ash etc. is stored. When in use, the receiving bag is used as a hand ashtray in the open and extended state, swung open about a cross fold separating the storage area from the receiving area, with an open receiving area and a closed storage area. When in use as a table ashtray, on the other hand, the receiving part of the receiving bag is angled relative to the storage part by approximately 90°, so that in the region of the storage part the table ashtray lies flat on the table and the receiving part, which is open above the cross fold by separation of the layers of the receiving bag, is angled approximately perpendicularly to the table. After use, the layers that have been separated as ash, cigarette butts, etc., were inserted, are placed together and the receiving part is bent relative to the storage part in the region of the cross fold, so that the two parts come to lie with their edges parallel, pointing in the same direction. Frequent bending in the region of the cross fold can

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result in damage to the receiving bag on its side edges in the region of the cross fold, so that under the circumstances the smell of ashes or even ashes can emerge. The load on the bag material and any elements that may be present that seal the side edges, such as adhesive strips, etc., on the side edges of the layers in the region of the cross fold, is significantly increased in that, when the receiving part is opened for inserting ash, etc., the two layers are generally buckled in as they are separated, in such a way that bend lines are formed running at an angle to the side edges and ending around the point of intersection between the side edges and the cross fold.

Consequently, the object of the present invention is to prevent excess stress or damage in the region of the intersection between the side edges and the cross fold, using means that are as simple and as cost-effective as possible.

Surprisingly, this object is achieved simply and effectively by the characteristics of Claim 1.

Particularly advantageous embodiments may be found in the dependent claims. The recesses preferably widen in the direction of the respective associated side edges, creating good bending behavior and good force transmission when the layers are separated in the region of the receiving area.

The respective recess edgings are expediently rounded in the region of the transition to a side edge. This assures that when

adhesive elements are used to seal the recesses, and preferably also for binding the two layers, excess stress on the adhesive element in the region of the inventive recesses will be prevented. In particular, an excess load or damage to the adhesive elements in this region caused by pressing in the edges will be prevented.

It is particularly advantageous if, between the cross fold and the edge of the layers on the opening side, preferably at the level of an additional cross fold on the edge side that is interrupted in the middle, additional recesses are provided on the side edges, which are sealed in the same manner as the recesses associated with the center cross fold. This reduces the load there, as well, during use as a table ashtray, where the receiving bag is bent in the region of the receiving part by moving the side edges together, in order to form a stable opening.

Additional characteristics and advantages of the invention may be found in the description of several exemplary embodiments below, with reference to the drawing and the remaining dependent claims.

The drawings show:

Figure 1 view of a receiving bag in accordance with this invention, sealed with adhesive strips,

Figure 2 a perspective view of a receiving bag in accordance with the invention, with layers of the receiving part separated from each other above a center cross fold for receiving ash,

Figure 3 a receiving bag in accordance with this invention, arranged in an opened case, and

Figure 4 a view of a receiving bag of the type described in this invention, inserted in a covering bag.

Figure 1 shows a receiving bag 1, made in the form of a double-walled bag, in particular for waste from smoking and/or chewing gum, having two congruent, parallel layers 2,3, one over the other, the upper layer 2 being visible in the top view shown. The layers 2,3 are made of a rigid flame-resistant material, e.g., a flame-resistant cardboard, provided with double-sided printing of flame-resistant varnishes or colorings, or a paper or cardboard material, etc., that has been treated with water-based varnish. In addition to a fireproof composition of the layers 2,3, it is also important that potential buyers appreciate the fireproof nature of the receiving bag, based on their visual impression. For this reason, the receiving bag can also be provided, for example, with a backing paper, etc., that is /3 fireproof to 220°. The receiving bag 1 is produced in a particularly environmentally friendly manner if it is made of cardboard having a grammage of 250–350 g/m<sup>2</sup>.

The receiving bag 1 is divided approximately at the middle by a cross fold 4 in the two layers 2, 3, forming an upper receiving part 5 and a lower storage part 6. As seen in Figure 2, for inserting ashes, the two layers 2, 3 of the receiving bag 1 are separated to form an opening 9 in the region of the receiving part 5 by pressing

together the side edges 7, 8 approximately in the middle of the receiving part 5 in the direction of arrows A, so that the ashes, etc., can be dropped into the receiving part 5. As seen in Figure 2, the opening 9 can be oval or alternatively, for example, rectangular. In the upper edge region of the receiving bag 1, the layers 2,3 are provided with tabs 10, which are not connected to each other. A cigarette can be temporarily placed between the tabs 10 of the two layers 2,3. Once all the ashes have been inserted, the ashes, etc., can be allowed to drop out of the receiving part 5 into the storage part 6, by separating the two layers 2,3 of the receiving bag 1 in the region of the cross fold 4. The ashes are stored in storage part 6 until they are disposed of. After the ashes have fallen out of the receiving part 5 into the storage part 6 in the direction of arrow B, the two layers 2,3 of the receiving bag 1 are restored to a planar position, one layer on the other, apart from the ashes in the storage area 6, so that the opening 9 in the receiving part 5 is closed.

When the receiving bag 1 is not in use, the tabs 10 are expediently turned to one side and the upper receiving part 5 of the receiving bag 1 folded about the axis C-C in the region of the cross fold 4 onto the storage part 6, so that the two parts come to lie approximately flat one on the other and the lower edge 11 of the receiving bag and the edge 12, which forms the upper edge when the tab 10 of the receiving bag 1 is folded, lie approximately one over the other.

As seen in Figure 3, the receiving bag 1 can be enclosed by a case 13, which also expediently has an opening in the region of opening 9 of the bag 1, so that the receiving bag 1 can be used without being removed from the case 13. The case 13 comprises a back wall 27, on which an insertion wall part 30 is placed in the region of a side edge 28 and the lower edge 11 of the receiving bag, under which the front wall 31 of the case 13, said wall being foldable about the axis F-F, can be inserted over a receiving bag 1 that has been inserted in the case.

The case 13 also expediently has a closure, such as a snap fastener 14, which can be made to engage with a holding member 15. The case is provided with grooves along axes F-F and C-C and, together with the inserted receiving bag 1, may be folded about these axes.

The two layers 2,3 of the receiving bag 1 can be joined together along the side edges 7,8 and the lower edge 11 of the receiving bag 1. In the embodiment shown in Figure 1, bonding adhesive strips 16, 17 are provided for this purpose on the outer surfaces of the layers 2,3 on the side edges 7 and one adhesive strip 18 on the lower edge 11. Instead of the two narrow adhesive strips 16,17 associated with the side edges 7,8, however, a wider adhesive strip extending over both side edges could be provided, by means of which the receiving bag 1 may be wrapped wholly or in part.



In addition, Figure 1 shows roundings 19 on the lower edge 11 of the receiving bag 1, which prevent damage to the adhesive strips in the corner region, particularly when the receiving bag 1 is being inserted into a case 13, as in Figure 3. In addition to or instead of the adhesive strips 18 associated with the lower edge 11, the two layers 2,3 of the bag can also be joined together by a sealing safety bond 20 in the region of the lower edge 11, in order to prevent odor and ashes from escaping in a particularly reliable manner. It would also be conceivable for the two layers 2,3 to be stuck together by means of a fold forming the lower edge, as indicated in Figure 2.

When the receiving part 5 is folded about the axis C-C onto the storage part 6, so that the receiving part 5 and the storage part 6 form parallel layers, and when it is folded about the axis C-C in Figure 3 into an approximately orthogonal position of the receiving part 5 and the storage part 6 (not shown), and when the side edges 7,8 are buckled in as in Figure 2 to open the receiving part 5 for putting ashes, etc., in it, the side edges 7, 8 are under a considerable load in the region of the cross fold 4, so that the layers 2,3 and adhesive elements, such as the adhesive strips 16, 17, etc., in this case, can become fatigued and break. For this reason, recesses 21,22 are provided on the side edges 7,8 of the layers 2,3 in the region of the cross fold 4, which considerably reduce the load on the layers 2,3 and optionally on the adhesive strips 16,17, etc., in this region. The recesses 21, 22 can be stamped out, cut out,

etc., when the layers 2,3 are produced. The layers 2,3 are then placed one on the other and joined together by at least one adhesive element, the adhesive strips 16, 17, and 18 in this case, which are also made of flame-resistant material.

In the embodiment according to Figures 1 and 2, the recesses 21,22 are also sealed by the lateral adhesive strips 16,17, which are present in any event. This is also true if a wider adhesive strip is provided, by means of which the receiving bag 1 is wrapped. However, it would also be conceivable for the two layers 2,3 to be stuck together in the region of the side edges by way of a fold. In this case, only stickers associated with the recesses 21,22 can be provided in the form of labels, etc. It would also be possible to seal the recesses 21,22 to insert the receiving bag 1 into a sleeve element, preferably in the form of a covering bag 40 indicated in Figure 4. /4

In Figure 1 the edgings 23, 24; 25, 26 of a recess 21,22 are made in the form of partial arcs that are arched toward each other, meeting at the cross fold 4, so that corners are avoided in this region.

The recess edgings 23, 24; 25, 26 can also have a different shape. For example, they may also be triangular. In this case, they are advantageously rounded at the transition to the side edges 27,28.

Figure 1 also shows arched additional recesses 27,28 between cross fold 4 and upper edge 12. They prevent fatigue of the side

edges of the layers in the region of the buckling used to open the waste container, as seen in Figure 2. The additional recesses 27, 28 are located at the intersection of an additional cross fold 29 and the cut edges 7,8. Here, the cross fold 29 is provided only in the region of the side edges 7,8, being interrupted in the middle of the receiving bag. Starting at the cross fold 29, approximately vertical folds extend in the direction of the fold formed by the upper edge 12, thus facilitating opening of the receiving bag 1. The recesses 27,28 associated with the cross fold 29 are expediently fashioned like the recesses 21,22 associated with the center cross fold 4 and sealed like the latter from the outside.

In the embodiment on which Figure 4 is based, the receiving bag 1, as previously indicated, is inserted into a double-walled covering bag 40 that is sealed at the bottom and on the side edges, which seals at least the side recesses 21,22 in the region of the middle cross fold 4 and optionally seals the side recesses 27,28 in the region of the opening cross fold 29. Thus, the covering bag 40 extends at least over the respective recesses that are to be sealed, in this case from the bottom over the recesses 27,28 associated with the opening cross fold 29. However, it is also possible to use the covering bag 40 to seal one or more joints in the region of the receiving bag 1. Such joints result when the receiving bag 1 is made of a blank that is folded 180° at the middle to form the lower edge 11 or along two parallel lines forming the side edges 7, 8. The

resulting joints can remain unbonded. In this case, of course, the covering bag 40 must extend over the entire length of the receiving bag 1.

The covering bag 40 expediently has an inner width corresponding to the outer width of the receiving bag 1 or slightly less, so that the receiving bag 1 fits tightly in the covering bag 40. Of course, it is also possible to attach the covering bag 40 to the receiving bag 1 by adhesion, for example, in order to prevent the latter from sliding out. The covering bag 40 can be made of transparent material or be printed or dyed. Making the covering bag 40 out of a thin plastic film material such as cellophane, etc., is particularly preferable. The two layers of the covering bag can be bonded together or, if plastic material is used, they may expediently be welded together, as indicated at 41.

In order to facilitate buckling of the receiving part 5 for opening, the fibers of the receiving bag 1 expediently extend in a direction perpendicular to the axis C-C. The inside of the layers 2,3 of the receiving bag 1 can be vapor coated, for example, with water-based varnish or aluminum, etc., giving the user a feeling of safety. The insides can also be coated in the opening region with fluorescent material, in order to facilitate use of the receiving bag 1 as an ashtray even under unfavorable lighting conditions, in particular in the dark, and to prevent ashes from accidentally falling beside the receiving bag 1 when an effort is made to insert them into the

receiving part 5. Particularly, when a case 13 according to Figure 3 is used, a middle recess for the passage of the snap fastener 14, which is to be snapped into the holding member 15 of the case, can be provided on the foldable tabs 10, making it possible to close the case even when the tabs 10 are not put into place. A layer 2 of the receiving bag can also be provided with a recess 31 on the folding tabs 10, facilitating opening of the bag.

## Claims

1. A device for receiving waste from smoking and/or chewing gum, with a double-walled receiving bag (1) that preferably can be inserted into a case (13), said bag containing two layers (2,3) made of a rigid material that is at least flame resistant and provided with a cross fold (4) approximately in the middle, above which a receiving part (5) for ash, etc., and beneath which a storage part (6) for storing the ash, etc., are provided, whereby the layers (2,3) can be separated at least in the region of the cross fold (4) for allowing the ash, etc., to fall from the receiving part (5) into the storage part (6), characterized in that a recess (21,11) is provided at the two side edges (7,8) of each of the two layers (2,3) at the level of the cross fold (4) and that the recesses (21,22) are sealed from the outside.

2. A device as recited in Claim 1, characterized in that, between the middle cross fold (4) and the edge (12) of the layers (2,3) on the opening side, preferably at the level of an opening cross fold (29) on the edge side that is interrupted in the middle, additional recesses (27,28) are provided on the side edges (7,8), which are sealed from the outside.

3. A device as recited in one of the previous claims, characterized in that the recesses (21,22;27,28) are sealed by at least one adhesive element attached to the outside of the receiving

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bag (1), by means of which the two layers (2,3) of the double-walled receiving bag (1) are joined together at least on their long sides.

4. A device as recited in claim 3, characterized in that the two layers (2,3) of the double-walled receiving bag are joined together at least on their long sides by adhesive strips (16,17) and that the recesses (21,22;27,28) are sealed by the adhesive strips (16,17).

5. A device as recited in Claim 3, characterized in that an adhesive element is provided with which the receiving bag (1) can be wrapped.

6. A device as recited in Claim 1 or 2, characterized in that the double-walled receiving bag (1) is inserted into a sleeve element, preferably a covering bag (40), by means of which at least the recesses (21,22;27,28) are sealed.

7. A device as recited in Claim 6, characterized in that the length of the sleeve element, which is preferably made in the form of the covering bag (40), corresponds to the length of the receiving bag (1).

8. A device as recited in one of the previous claims, characterized in that the recesses (21,22;27,28) expand in the direction of their respective associated side edges (7,8).

9. A device as recited in one of the previous claims, characterized in that the recess edgings (23,24,25,26) are rounded in the region of the respective transition to a side edge (7,8).

10. A device as recited in one of the Claims 8 or 9,  
characterized in that the recesses (21,22;27,28) are delimited by two  
partial arcs that are arched toward each other and that meet at their  
respective associated cross fold (4,29).



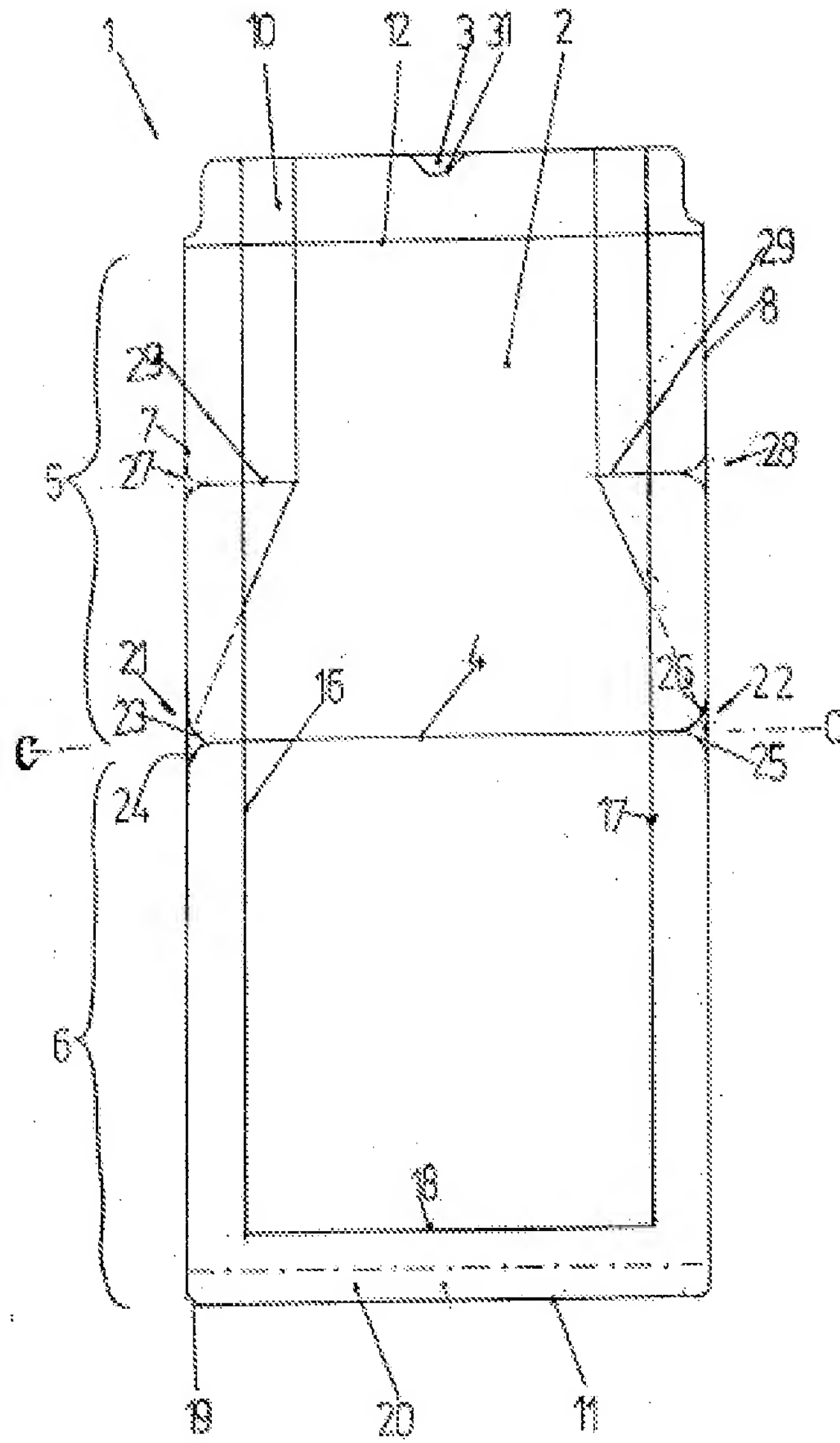
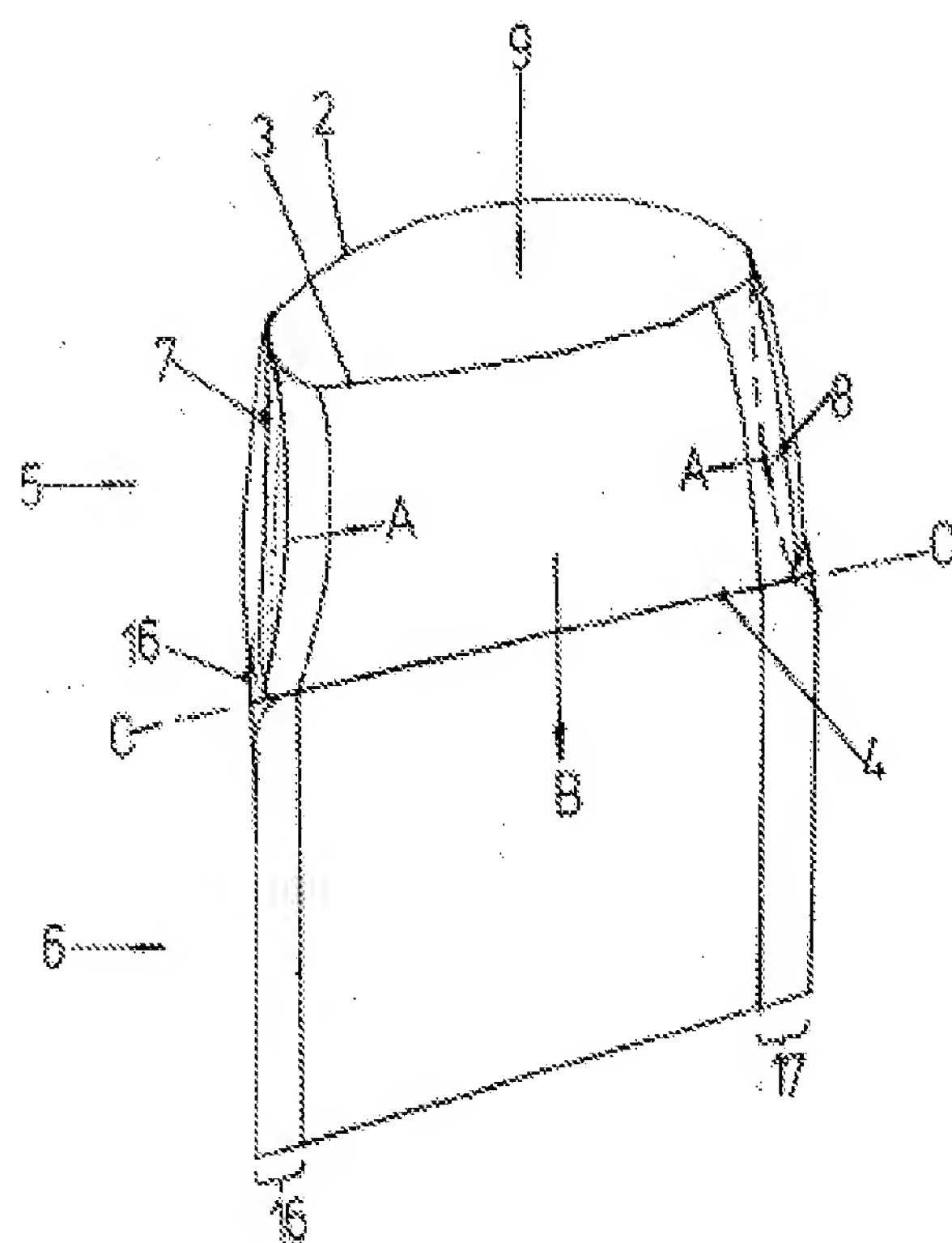


FIG 1



FID2

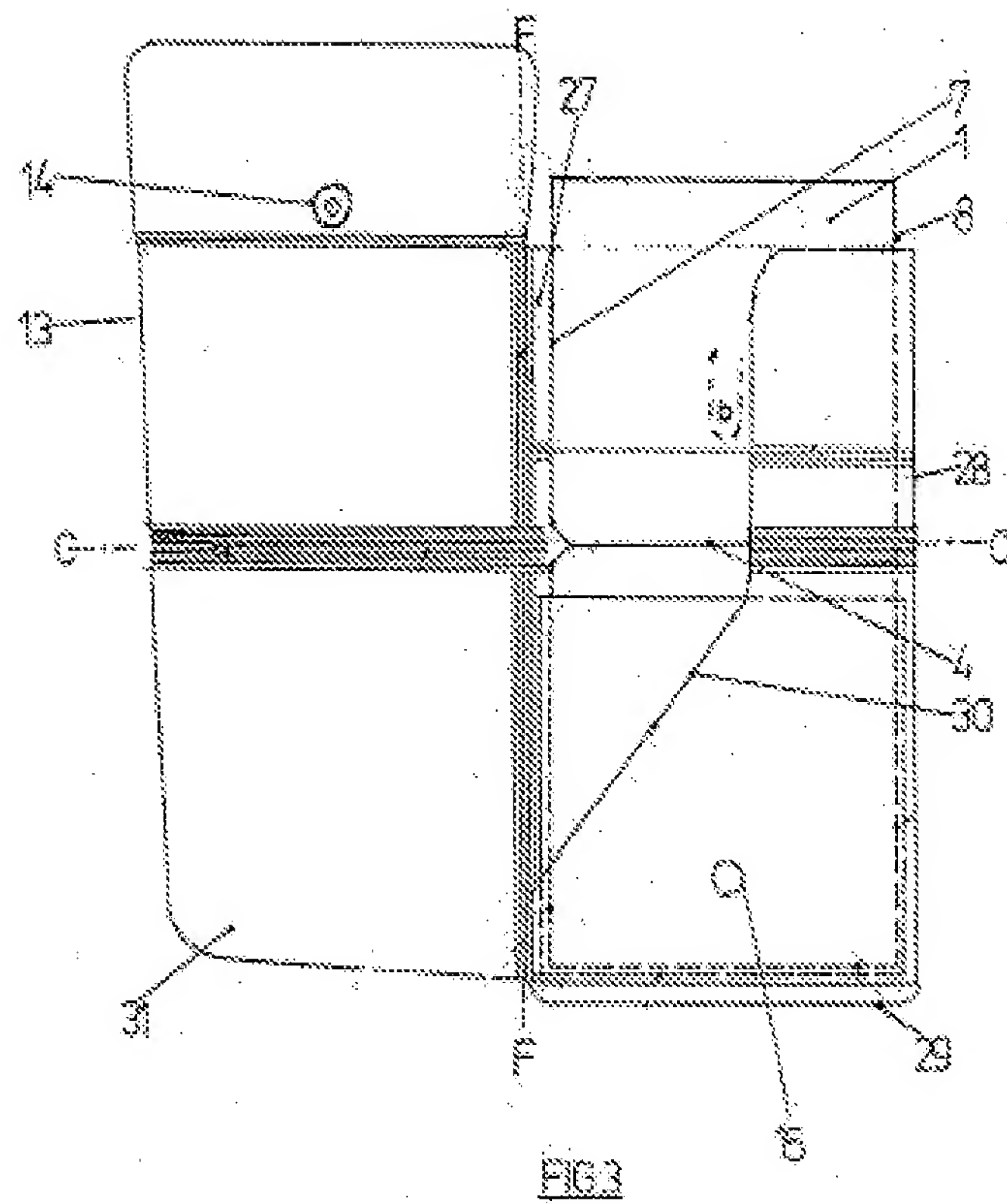


Fig 4

